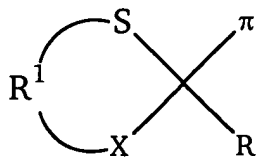
Claims:

1-17 (Cancelled)

18. (Previously presented) A functional polymer that is defined by the following formula:



where R is selected from C_1 to C_6 trialkyl-silyl groups, C_1 to C_{20} alkyl groups, C_4 to C_{20} cycloalkyl groups, C_6 to C_{20} aryl groups, thienyl, furyl, and pyridyl groups; and R may optionally have attached thereto any of the following functional groups: C_1 to C_{10} alkyl groups, C_6 to C_{20} aryl groups, C_2 to C_{10} alkenyl groups, C_3 to C_{10} non-terminal alkynyl groups, ethers, *tert*-amines, oxazolines, thiazolines, phosphines, sulfides, silyls, and mixtures thereof; where R^1 is selected from C_2 to C_8 alkylene groups, where X is sulfur, and where π is a polymer chain.

19. (Previously presented) The polymer of claim 18, where said polymer chain derives from the anionic polymerization of monomer including conjugated dienes and optionally vinyl aromatics.

20. (Previously presented) The polymer of claim 18, where said polymer chain includes poly(styrene-*co*-butadiene).

21. (Previously presented) The polymer of claim 18, where said polymer chain includes a terminal functional group that includes a trialkyltin group, a thiazoline group, a trialkoxysilane group, or a carboxamide group.

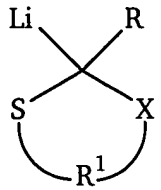
22. (Previously presented) The polymer of claim 18, where said polymer chain includes a terminal group resulting from the termination of said polymer chain with a reagent selected from the group consisting of tin tetrachloride, tributyltin chloride,

dibutyltin chloride, tetraethylorthosilicate, 1,3-dimethyl-2-imidazolidinone, and mixtures thereof.

23. (Previously presented) The polymer of claim 18, where R includes a C_6 to C_{20} aryl group having attached thereto a *tert*-amine group.

24. (Previously presented) A method for preparing a functional polymer, the method comprising:

contacting monomer including conjugated dienes with a sulfur-containing initiator to form a living polymer, where the initiator is defined by the formula



where R is selected from C_1 to C_6 trialkyl-silyl groups, C_1 to C_{20} alkyl groups, C_4 to C_{20} cycloalkyl groups, C_6 to C_{20} aryl groups, thienyl, furyl, and pyridyl groups; and R may optionally have attached thereto any of the following functional groups: C_1 to C_{10} alkyl groups, C_6 to C_{20} aryl groups, C_2 to C_{10} alkenyl groups, C_3 to C_{10} alkynyl groups, ethers, *tert*-amines, oxazolines, thiazolines, phosphines, sulfides, silyls, and mixtures thereof; where R^1 is selected from C_2 to C_8 alkylene groups, and where X is sulfur.

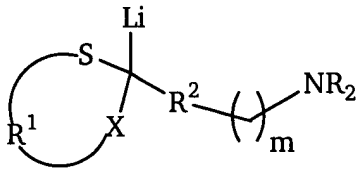
25. (Currently amended) The method of claim 24, where the monomer includes conjugated dienes and ~~optionally~~ vinyl aromatics.

26. (Previously presented) The method of claim 25, where said step of contacting takes place in a solvent.

27. (Previously presented) The method of claim 26, further comprising contacting the living polymer with a terminating agent, a coupling agent, or a linking agent.

28. (Previously presented) The method of claim 27, where the terminating agent is selected from the group consisting of tin tetrachloride, tributyltin chloride, dibutyltin chloride, tetraethylorthosilicate, 1,3-dimethyl-2-imidazolidinone, and mixtures thereof.

29. (Previously presented) The method of claim 24, where the sulfur-containing initiator is defined by the formula

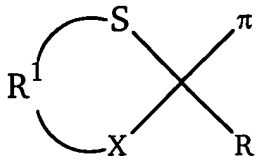


where R is selected form the group consisting of C_1 to C_6 Trialkyl-silyl groups, C_1 to C_{20} alkyl groups, C_4 to C_{20} cycloalkyl groups, C_6 to C_{20} aryl groups, thienyl, furyl, and pyridyl groups; where R^1 is selected form the group consisting of C_2 to C_8 alkylene groups; where R^2 is selected from the group consisting of C_1 to C_8 alkylene groups, C_3 to C_{12} cycloalkylene groups and C_6 to C_{18} arylene groups; where m is 0 to about 8, and where X is sulfur.

30. (Currently amended) The method of claim 24, wherein the initiator is selected from the group consisting of 2-lithio-2-methyl-1,3-dithiane, 2-lithio-2-phenyl-1,3-dithiane, 2-lithio-2-(4-dimethylamino)phenyl-1,3-dithiane, 2-lithio-2-trimethylsilyl-1,3-dithiane~~, and initiators selected from the group consisting of 2-lithio-2-phenyl-1,3-dithiane, 2-lithio-2-(4-dimethylaminophenyl)-1,3-dithiane,~~ and 2-lithio-2-(4-dibutylaminophenyl)-1,3-dithiane.

31. (Previously presented) A vulcanized rubber composition comprising:

the vulcanization product of a functional polymer, where the functional polymer is defined by the formula



where R is selected from C_1 to C_6 trialkyl-silyl groups, C_1 to C_{20} alkyl groups, C_4 to C_{20} cycloalkyl groups, C_6 to C_{20} aryl groups, thienyl, furyl, and pyridyl groups; and R may optionally have attached thereto any of the following functional groups: C_1 to C_{10} alkyl groups, C_6 to C_{20} aryl groups, C_2 to C_{10} alkenyl groups, C_3 to C_{10} non-terminal alkynyl groups, ethers, *tert*-amines, oxazolines, thiazolines, phosphines, sulfides, silyls, and mixtures thereof; where R^1 is selected from C_2 to C_8 alkylene groups, where X is sulfur, and where π is a polymer chain.

32. (Previously presented) The vulcanized rubber of claim 31, where said polymer chain derives from the anionic polymerization of monomer including conjugated dienes and optionally vinyl aromatics.

33. (Previously presented) The vulcanized rubber of claim 31, where said polymer chain includes a terminal functional group that includes a trialkyltin group, a thiazoline group, a trialkoxysilane group, or a carboxamide group.

34. (Previously presented) The vulcanized rubber of claim 31, where said polymer chain includes a terminal group resulting from the termination of said polymer chain with a reagent selected from the group consisting of tin tetrachloride, tributyltin chloride, dibutyltin chloride, tetraethylorthosilicate, 1,3-dimethyl-2-imidazolidinone, and mixtures thereof.

35. (Previously presented) The vulcanized rubber of claim 31, where the rubber composition further comprises a filler selected form the group consisting of carbon black, silica, starch, aluminum hydroxide, magnesium hydroxide, clays, and mixtures thereof.

36. (Previously presented) The vulcanized rubber of claim 32, where R includes a C_6 to C_{20} aryl group having attached thereto a *tert*-amine group.

37. (Currently amended) A tire component comprising the rubber composition of ~~claims~~ claim 33.